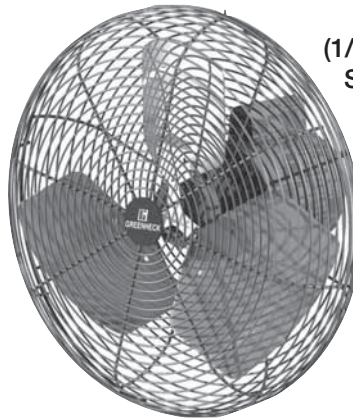


## Installation, Operation and Maintenance Manual

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with instructions could result in personal injury and/or property damage! Retain instructions for future reference.

### Models IC & ICO

Designed for cooling workers in factories, warehouses, manufacturing facilities and garages where humid and demanding conditions exist. All circulator heads have high efficiency corrosion resistant propellers with aluminum blades. Circulator heads utilize a vertical tilt/locking adjustment for directional flow. Wire guards are gray polyester powder-coated and comply with OSHA Standard 1910.212



(1/2" max opening). Fans are UL/cUL Listed Standard 507. Oscillating units sweep through 45° or 90° arc.

Permanent split capacitor 2-speed motors are totally enclosed air over. Circulators have 115V motors, a pull chain switch and include a 10 ft. factory wired, 3-conductor cord with grounded molded plug. Circulators have a maximum ambient temperature of 104°F.

### General Safety Information

#### WARNING

To reduce the risk of fire, electrical shock, or injury to persons, observe the following:

- a. Use this unit only in the manner intended by the manufacturer. If you have questions, contact the manufacturer.
- b. Before servicing or cleaning unit, switch power off at service panel and lock the service disconnecting the means to prevent power from being switched on accidentally. When the service disconnecting means cannot be locked, securely fasten a prominent warning device, such as a tag, to the service panel.

#### WARNING

Do not depend on any switch to disconnect power supply. Always unplug the power cord or turn off and lock disconnecting means as described.

#### WARNING

To reduce the risk of fire, electrical shock, or injury to persons, observe the following:

- a. Installation work and electrical wiring must be done by a qualified person(s) in accordance with all applicable codes and standards, including fire-rated construction.
- b. When cutting or drilling into wall or ceiling, do not damage electrical wiring and other hidden utilities.

#### DANGER

Do not place body parts or objects in circulator or motor openings while motor is connected to the power source.

#### WARNING

To reduce the risk of fire or electrical shock, do not use this fan with any solid-state speed control device. Do not use a three-prong to two-prong adapter on the power cord.

#### WARNING

To reduce the risk of electric shock, do not expose to water or rain.

#### WARNING

Do not use general purpose circulators in flammable, explosive, chemical-laden, or wet or rainy atmospheres. Use special purpose circulators designed for particular application. Do not attach ductwork to a circulator.

1. Read and follow all instructions, cautionary markings and make sure power source conforms to the requirement of the equipment.
2. Follow all local electrical and safety codes, as well as the National Electrical Code (NEC) and the Occupational Safety and Health Act (OSHA) in the United States, including fire rated construction. Ground motor in accordance with NEC Article 250 (grounding).

3. Avoid using extension cords. If used, be sure cord is UL rated and of proper type, gauge and length. Never operate more than one fan from a single extension cord.
4. Do not kink power cord or allow it to contact oil, grease, hot surfaces, sharp objects or chemicals. Replace worn or damaged cord immediately.
5. In critical applications, use a suitable alarm (air switch, temperature sensor, etc.) should the circulator malfunction.

Dimensions and Specifications				
Model	Prop. Dia.	Shaft Dia.	A	B
IC-20-B4-J1	20 (508)	1/2	23 (584)	12¼ (311)
IC-24-B3-J1	24 (610)	1/2	27 (686)	12¼ (311)
IC-30-B5-J1	30 (762)	1/2	33 (838)	14¼ (362)
ICO-20-B4-J1	20 (508)	1/2	23 (584)	16¼ (413)
ICO-24-B5-J1	24 (610)	1/2	27 (686)	16¼ (413)
ICO-30-B5-J1	30 (762)	1/2	33 (838)	19 (483)

All dimensions in inches (millimeters).

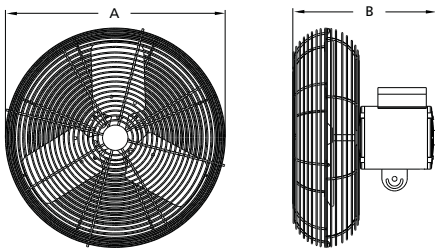


Figure 1

## Receiving

Upon receiving the product check to make sure all items are accounted for by referencing the bill of lading to ensure all items were received. Inspect each crate for shipping damage before accepting delivery. Notify the carrier if any damage is noticed. The carrier will make notification on the delivery receipt acknowledging any damage to the product. All damage should be noted on all the copies of the bill of lading which is countersigned by the delivering carrier. A Carrier Inspection Report should be filled out by the carrier upon arrival and the Traffic Department. If damaged upon arrival, file claim with carrier. Any physical damage to the unit after acceptance is not the responsibility of Greenheck Fan Corporation.

## Unpacking

Verify that all required parts and the correct quantity of each item have been received. If any items are missing report shortages to your local representative to arrange for obtaining missing parts. Sometimes it

is not possible that all items for the unit be shipped together due to availability of transportation and truck space. Confirmation of shipment(s) must be limited to only items on the bill of lading.

## Handling

Handle in such a manner as to keep from scratching or chipping the coating. Damaged finish may reduce ability of fan to resist corrosion.

## Storage

Fans are protected against damage during shipment. If the unit cannot be installed and operated immediately, precautions need to be taken to prevent deterioration of the unit during storage. The user assumes responsibility of the fan and accessories while in storage. The manufacturer will not be responsible for damage during storage. These suggestions are provided solely as a convenience to the user.

### INDOOR

The ideal environment for the storage of fans and accessories is indoors, above grade, in a low humidity atmosphere which is sealed to prevent the entry of blowing dust, rain, or snow. Temperatures should be evenly maintained between 30°F (-1°C) and 110°F (43°C) (wide temperature swings may cause condensation and “sweating” of metal parts). All accessories must be stored indoors in a clean, dry atmosphere.

The unit should be stored at least 3½ in. (89 mm) off the floor on wooden blocks covered with moisture proof paper or polyethylene sheathing. Aisles between parts and along all walls should be provided to permit air circulation and space for inspection.

## Inspection and Maintenance During Storage

While in storage, inspect fans once per month. Keep a record of inspection and maintenance performed.

If moisture or dirt accumulations are found on parts, the source should be located and eliminated. At each inspection, rotate the propeller by hand ten to fifteen revolutions to distribute lubricant on motor.

### REMOVING FROM STORAGE

As fans are removed from storage to be installed in their final location, they should be protected and maintained in a similar fashion, until the fan equipment goes into operation.

Prior to fully assembling and installing the fan inspect the fan assembly to make sure it is in working order.

1. Check all fasteners, set screws on the fan, wheel, bearings, drive, motor base and accessories for tightness.
2. Rotate the propeller by hand and assure no parts are rubbing.

## Installation

### WARNING

Installation and troubleshooting to be performed only by qualified person(s).

### CAUTION

To reduce the risk of injury, use only with recommended Greenheck accessories in owners manual.

### WARNING

Use only GFCI receptacles.  
Not for outdoor applications.

1. All 115V, 1-phase circulators include a factory wired, 3-conductor cord with grounded molded plug.
2. To mount circulator, refer to the instructions provided with the corresponding accessory.

Accessories	
Model	Description
BKT-WPC-100	Wall/Post/Ceiling Bracket
BKT-SPN-100	Suspension Bracket
BKT-IBM-100	I-Beam Bracket
PED-CG72	Closed-Base Pedestal, Gray
PED-WK	Wheel Kit for Pedestal

## Operation

1. The 2-speed, 115V motors operate by pulling the chain: Off-Low-Off-High.
2. For fan oscillation, tighten adjustment knob at top of motor clockwise until it stops. Adjust the sweep by securing eccentric arm: 90° sweep, connect to outer threaded hole; 45° sweep, connect to inner threaded hole.
3. Keep circulator head free from obstructions.

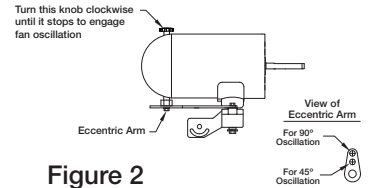


Figure 2

### WARNING

To reduce the risk of injury disconnect from power supply before servicing. Always unplug the power cord.

### IMPORTANT

When making repairs, use only Greenheck Fan Corporation authorized repair parts.

## Maintenance

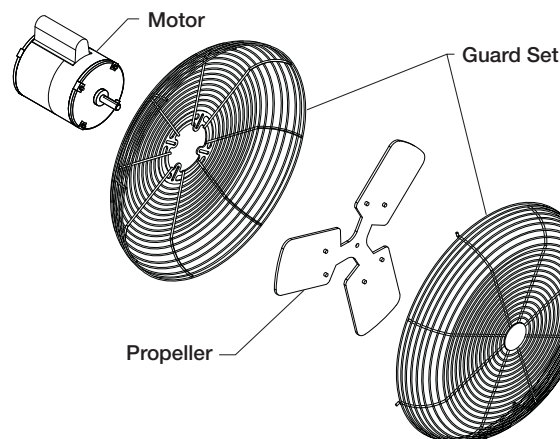
1. With a dry rag, periodically clean propeller, guard, and motor when excessive dirt and particles accumulate. Allow motor sufficient time to cool as it may be hot enough to cause injury.
2. Follow motor manufacturer's instructions for motor lubrication.
3. Check for unusual noises when circulator is running.
4. Periodically inspect and tighten all bolts.

## Parts List

### NOTE

Each fan bears a manufacturer's nameplate with model number and serial number. This information will assist the local Greenheck representative and the factory in providing service and replacement parts. Before taking any corrective action, make certain unit is not capable of operation during repairs.

## Industrial Air Circulators



## Troubleshooting

**WARNING:** Before taking any corrective action, make certain unit is not capable of operation during repairs.

PROBLEM	CAUSE	CORRECTIVE ACTION
Fan Inoperative	Blown fuse or open circuit breaker	Replace or repair
	Defective motor or switch	Replace or repair
Fan Cycles On and Off	Thermal protector	Check for obstructions to airflow, low or high voltage, excessive intake air temperatures above 140°F
	Faulty wiring or control switch	Replace or repair
Unit Fails to Oscillate (sweep)	Eccentric arm not secured	Tighten
	Defective gear assembly	Replace motor
Excessive Noise While Operating	Loose or damaged propeller	Tighten or replace
	Motor no secure	Tighten motor nuts
Insufficient Air Flow	Guard excessively dirty	Clean guards



Models IC and ICO are listed electric fans (UL/cUL 507).  
File no. E33599

## Warranty

Greenheck warrants this equipment to be free from defects in material and workmanship for a period of one year from the shipment date. Any units or parts which prove defective during the warranty period will be replaced at our option when returned to our factory, transportation prepaid. Motors are warranted by the motor manufacturer for a period of one year. Should motors furnished by Greenheck prove defective during this period, they should be returned to the nearest authorized motor service station. Greenheck will not be responsible for any removal or installation costs.

*As a result of our commitment to continuous improvement, Greenheck reserves the right to change specifications without notice.*



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